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AD 106072

Armed Services Technical Information Agency

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PRINCETON UNIVERSITY
PRINCETON, NEW JERSEY
SCHOOL OF ENGINEERING, JOHN C. GREEN FOUNDATION

DEPARTMENT OF AERONAUTICAL ENGINEERING
THE JOHN C. FORRESTAL RESEARCH CENTER

FC

July 3, 1956

AD No. 106072
ASTIA FILE COPY

To: Commanding Officer
Office of Naval Research
Air Branch/Code 461
Department of the Navy
Washington 25, D. C.

Subject: Tandem Helicopter Stability Program, Status Report for
the month of June, 1956.

Contract N6 onr-27024

Flight Test Operations:

An entirely new technique for flight calibration of the sideslip or yaw vane was developed during June. The method consisted of a fuselage mounted gun-camera that recorded sections of U. S. Highway #1 during data flights. This method was quite successful as it allowed accurate angular measurements to be made. These measurements, compared with oscilloscope traces, now give the traces usable meaning.

On June 15, mechanical failure of the front right lateral and the rear right lateral screw-jacks was discovered and the helicopter was grounded pending replacement of these parts (see letter to Mr. Thomas Wilson, dated June 25, 1956 of the Office of Naval Research, Washington, D. C.). As explained in the above mentioned letter, flight testing to obtain data for the lateral dynamic stability and control analysis will be delayed.

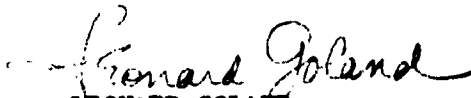
Theoretical Analysis:

The preliminary theoretical report on static and dynamic lateral

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stability is now complete in rough draft form. The work of formalizing the report is now underway.

Very truly yours,


LEONARD GOLAND
Chief Project Engineer

LG/nt

cc: 3 - Commanding Officer, ONR, Wash.
1 - Commander C. W. Meshier
1 - J. Levy, ONR, N. Y.
1 - Special Devices Center - Code 910
1 - R. Booth, DE 31, BuAer
8 - Office Chief of Trans. Dept. of the Army
1 - Asst. Chief of Staff, G-4, R & D
1 - Commanding General, Fort Monroe, Virginia ATDEV-6
1 - David Taylor Model Basin, Maryland - Code 634
1 - President, Board No. 6, CONARC, Camp Rucker, Alabama
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